

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Bengt Sandberg, et al.

U.S. Serial No.: To Be Assigned

Group Art Unit: To Be Assigned

Filed: : June 15, 2001 (Herewith)

Examiner: To Be Assigned

For : BIOTIN DERIVATIVES

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to or concurrent with calculation of the filing fees, please amend this application as follows.

IN THE CLAIMS

Applicants have attached to this Preliminary Amendment documents entitled "Amended Claims" and "'Marked-up' Copy of the Previous Claims". Please replace present claims 10, 11 and 17 in this application with amended claims 10, 11 and 17 shown in the document entitled "Amended Claims".

REMARKS

Entry and consideration of this Preliminary Amendment courteously are solicited prior to or concurrent with calculation of the filing fees with respect to the claim set presented with the Preliminary Examination Report being filed herewith.

Examination on the merits is awaited.

Respectfully submitted,

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June 15, 2001

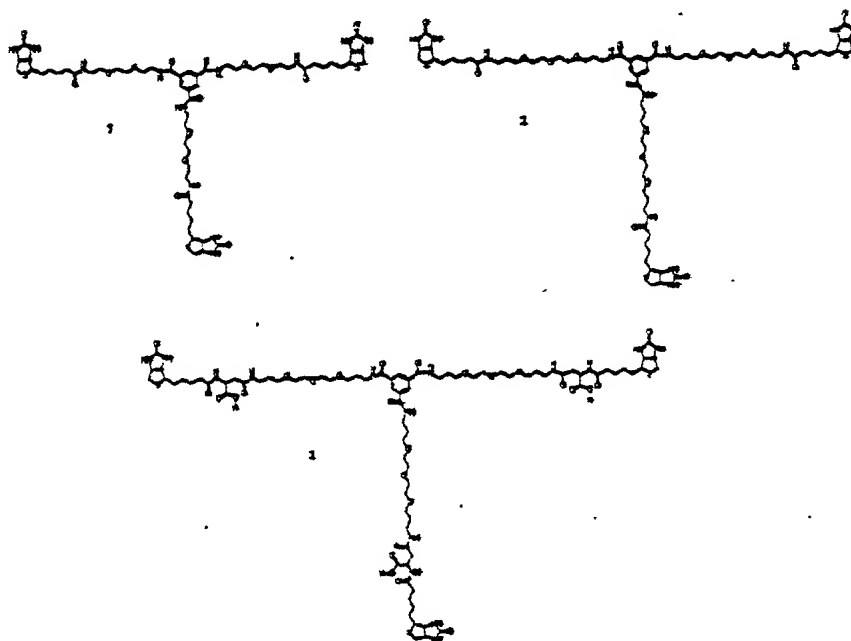
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**“Marked-Up” Copy of the Previous Claims**

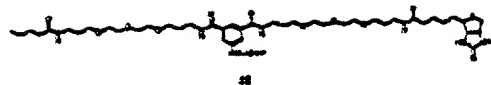
"Marked-Up" Copy of Previous Claims

10. Method according to [any of the previous claims] claim 1, wherein the toxin binding moiety is biotin, the spacers a, b, and c are 4, 7, 10-trioxa-1, 13-tridecanediamine and the trifunctional cross-linking moiety is 5-amino-1, 3-dicarboxybenzene.

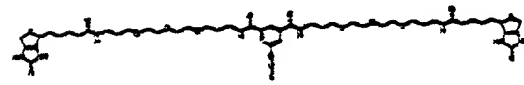
11. Method according to [any of the claims 1-9] claim 1, wherein it is







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Chemical structure 28 is a long-chain molecule. It features a central benzene ring connected to two long, flexible alkyl chains. Each alkyl chain is terminated with a phenyl group. The structure is symmetrical and appears to be a model for a liquid-crystalline material.

17. Method according to [any of claims 13-16] claim 13, wherein the biotinylated targeting biomolecules are targeting molecules containing natural biotin or derivatives thereof, the biotin-binding molecules are molecules containing avidin, streptavidin or derivatives thereof, the biotinylated molecules are radiolabelled biotin derivatives containing a radiometal chelation moiety, and the effector molecule is a radionuclide or a cytotoxic agent.

17. Method according to [any of claims 13-16] claim 13, wherein the biotinylated targeting biomolecules are targeting molecules containing natural biotin or derivatives thereof, the biotin-binding molecules are molecules containing avidin, streptavidin or derivatives thereof, the biotinylated molecules are radiolabelled biotin derivatives containing a radiometal chelation moiety, and the effector molecule is a radionuclide or a cytotoxic agent.

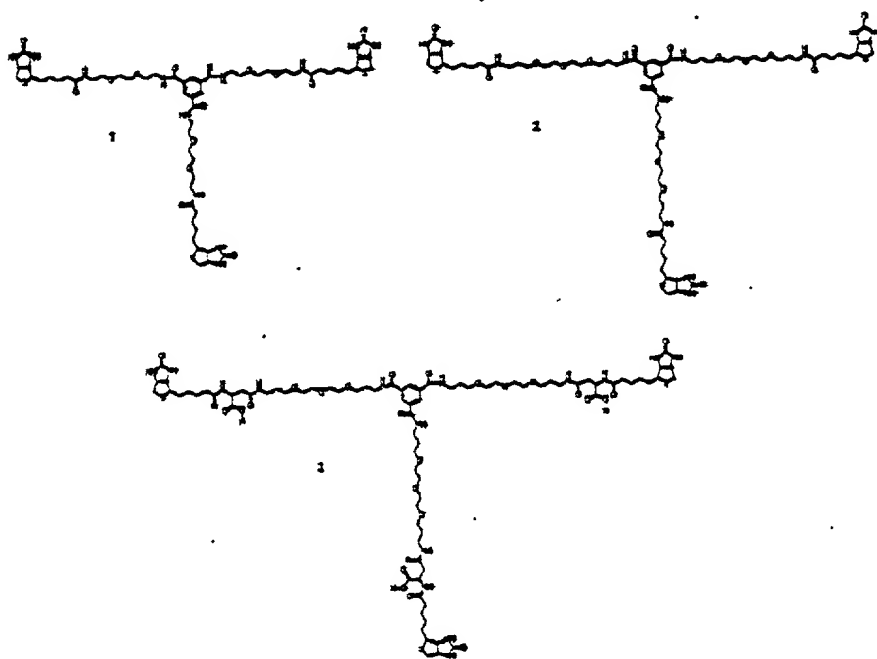
## Amended Claims

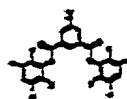
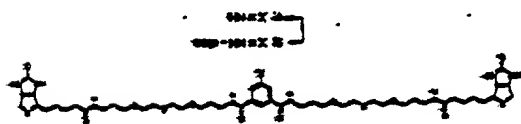
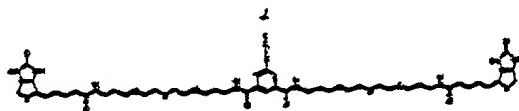
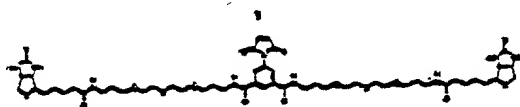
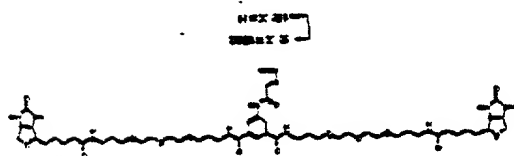
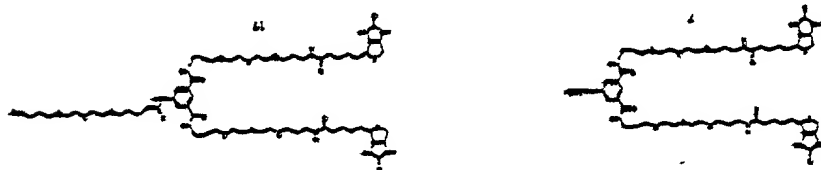
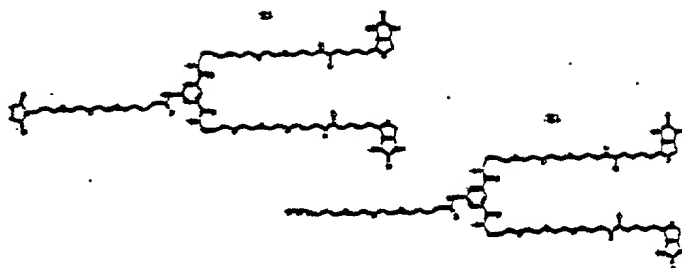
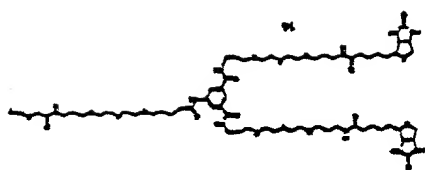


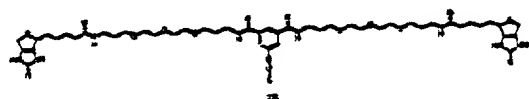
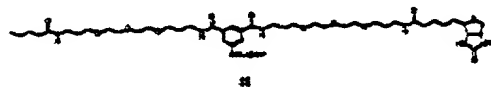
## Amended Claims

10. Method according to claim 1, wherein the toxin binding moiety is biotin, the spacers a, b, and c are 4, 7, 10-trioxa-1, 13-tridecanediamine and the trifunctional cross-linking moiety is 5-amino-1, 3-dicarboxybenzene.

11. Method according to claim 1, wherein it is



[illegible]



24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

17. Method according to claim 13, wherein the biotinylated targeting biomolecules are targeting molecules containing natural biotin or derivatives thereof,

the biotin-binding molecules are molecules containing avidin, streptavidin or derivatives thereof,

the biotinylated molecules are radiolabelled biotin derivatives containing a radiometal chelation moiety, and the effector molecule is a radionuclide or a cytotoxic agent.

17. Method according to claim 13, wherein the biotinylated targeting biomolecules are targeting molecules containing natural biotin or derivatives thereof,